

6KT6

Semiremote-Cutoff Pentode

9-PIN MINIATURE TYPE
FRAME-GRID CONSTRUCTION DARK HEATER
For High-Gain IF-Amplifier Applications in TV Receivers

ELECTRICAL CHARACTERISTICS

Bogey Values^a

Heater Voltage (AC or DC).	E_h	6.3	V
Heater Current	I_h	300	mA
Heater Warm-up Time.	-	11	s
Direct Interelectrode Capacitances			
Without external shield			
Grid No.1 to plate.	C_{g1-p}	0.019 max	pF
Input: G1 to (K, G3 + IS, G2, H). . .	C_i	9.5	pF
Output: P to (K, G3 + IS, G2, H). . .	C_o	3	pF

For the following characteristics, see Conditions

Plate Resistance (Approx.)	r_p	160	-	Ω
Transconductance	g_m	18000	-	μmho
DC Plate Current	I_b	17	-	mA
DC Grid-No.2 Current	I_{c2}	4.2	-	mA
Cutoff DC Grid-No.1 Voltage	$E_{c1(co)}$	-	-22	V

^aFor $g_m = 10 \mu\text{mho}$

Conditions

Heater Voltage	E_h	Bogey Value	V
DC Plate Supply Voltage.	E_{bb}	125 170	V
DC Grid-No.3 Voltage	E_{c3}	0 0	V
DC Grid-No.2 Supply Voltage	E_{cc2}	125 170	V
Grid No.1.	-	Connected to negative end of R_k	
Cathode Resistor	R_k	56 56	Ω

MECHANICAL CHARACTERISTICS

Operating Position	Any
Type of Cathode.	Coated Unipotential
Maximum Overall Length	2.187 in
Maximum Seated Length.	1.937 in
Maximum Diameter	0.875 in
Length, Base Seat to Bulb Top.	1.469 to 1.656 in
Excluding tip	
Dimensional Outline (JEDEC 6-2).	See General Section
Envelope	JEDEC T6-1/2
Base	Small-Button Noval 9-Pin (JEDEC E9-1)



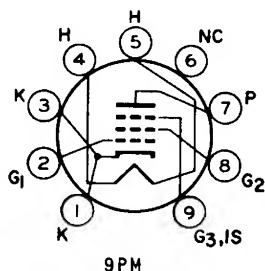
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TERMINAL DIAGRAM (Bottom View)

Pin 1 - Cathode
 Pin 2 - Grid No.1
 Pin 3 - Cathode
 Pin 4 - Heater
 Pin 5 - Heater
 Pin 6 - No Internal
 Connection
 Pin 7 - Plate
 Pin 8 - Grid No.2
 Pin 9 - Grid No.3,
 Internal Shield



DESIGN-MAXIMUM RATINGS

For operation as a Class A₁ Amplifier Tube in TV Receivers

DC Plate Voltage	E_b	330	V
DC Grid-No.3 (Suppressor-Grid) Voltage	E_{c3}	+0	V
DC Grid-No.2 (Screen-Grid) Supply Voltage.	E_{cc2}	330	V
DC Grid-No.2 Voltage	E_{c2}	See Grid-No.2	

Input Rating Chart

<i>at front of Receiving Tube Section</i>			
DC Grid-No.1 (Control-Grid) Voltage.	E_{c1}	+0	V
Heater-Cathode Voltage			
Peak	e_{hkm}	±200	V
Average.	$E_{hk(av)}$	100	V
Heater Voltage (AC or DC).	E_h	5.7 to 6.9	V
Grid-No.2 Input	P_{g2}		
For $E_{c2} \leq 165$ V.		0.6	W
For $E_{c2} > 165$ V and < 330 V.	-	See Grid-No.2	

Input Rating Chart

<i>at front of Receiving Tube Section</i>			
Plate Dissipation.	P_b	3.1	W

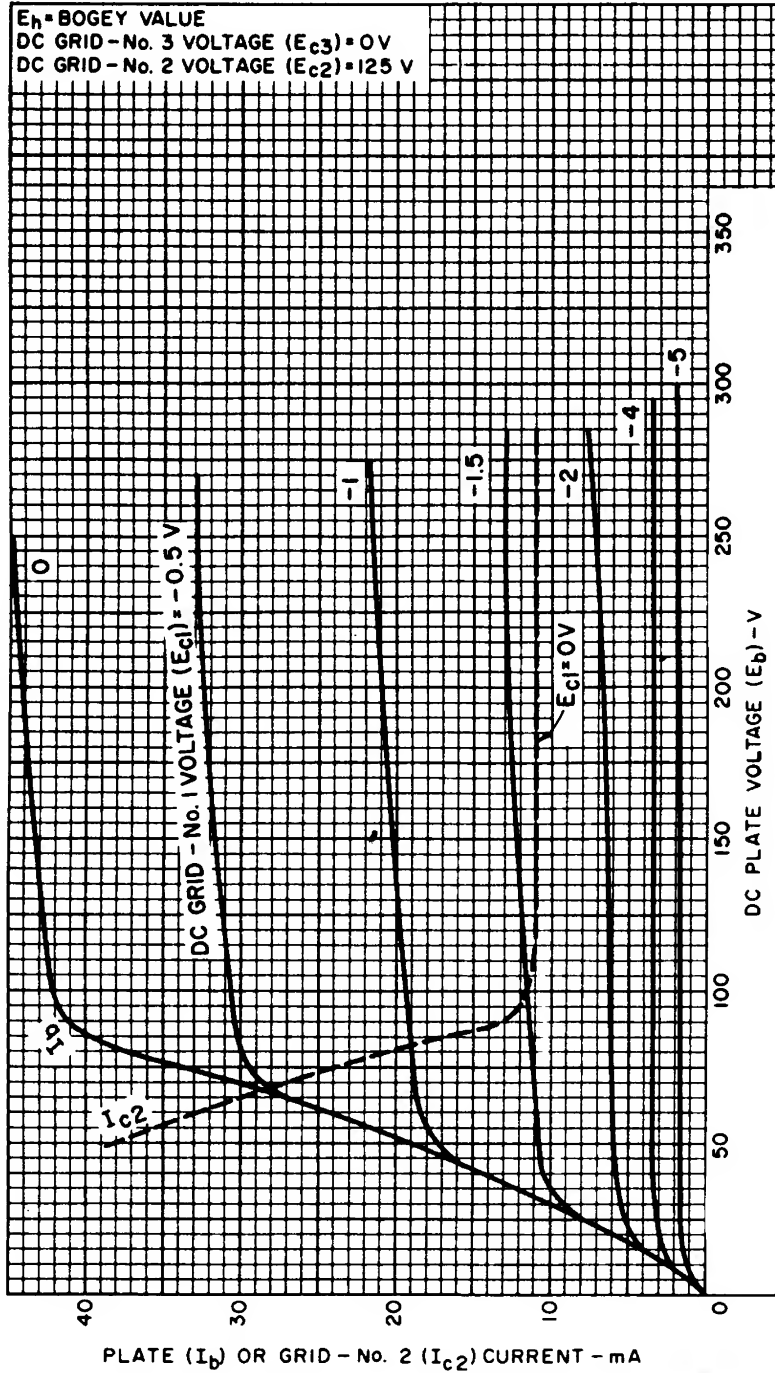
MAXIMUM CIRCUIT VALUES

Grid-No.1 Circuit Resistance	$R_{g1(ckt)}$		
For fixed-bias operation	-	250	k Ω
For cathode-bias operation	-	1	M Ω

^a Unless otherwise specified.



Typical Characteristics



92CM-14009

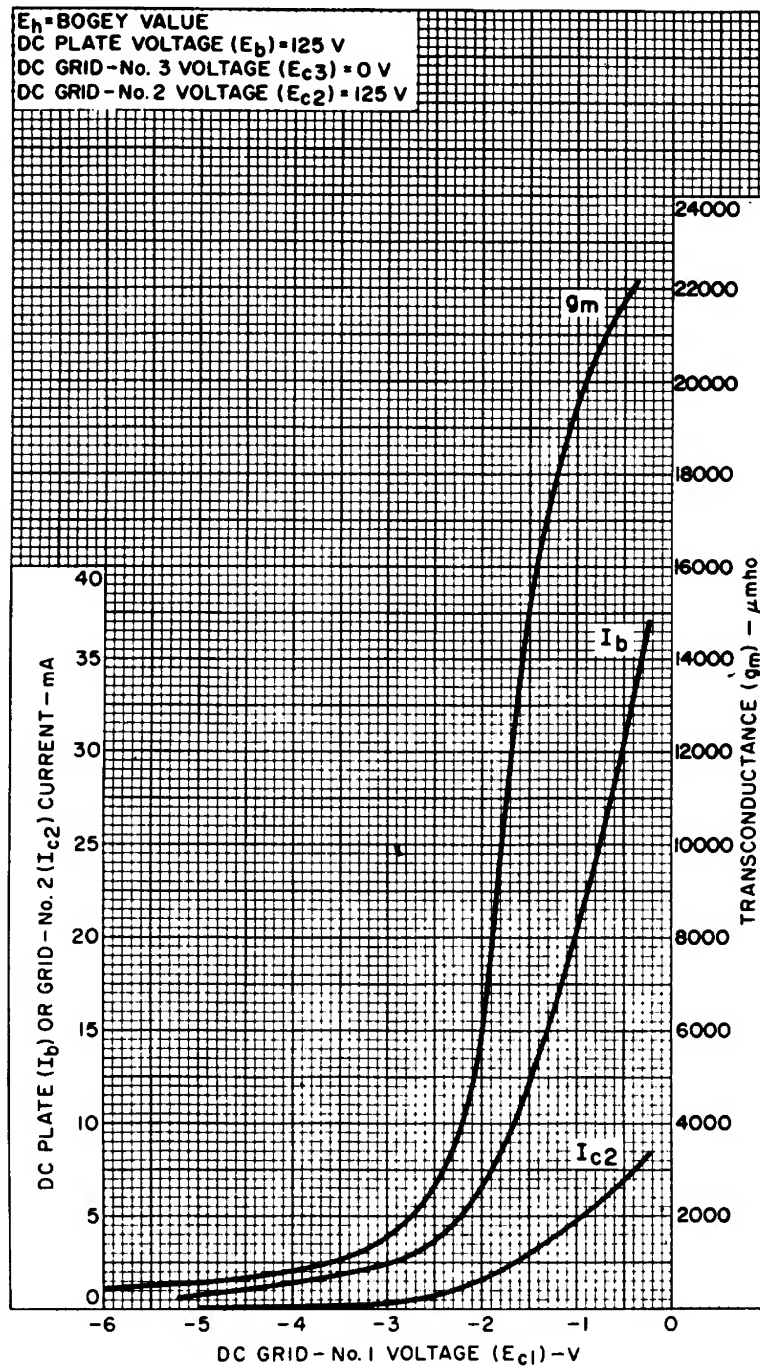


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Typical Characteristics



92CM-14005

